

Application No.: 10/042,473

REMARKS

The Office Action of August 11, 2005, has been carefully considered. The rejections are traversed and reconsideration of this application, and allowance thereof, is respectfully requested.

Claim 1 has been amended in view of the Examiner's remarks in the Advisory Action that a "reservoir" is interpreted as being broader than a "non-pressurized reservoir," and to recite the relationship between the liquid pumping system so as to emphasize the batch nature and of the claimed system. Claims 10 and 15 – 17 have been amended to clarify the device elements associated with the limitations previously set forth in the claims. Support for the amendments herein is found in the claims themselves and in the related drawings and description (e.g., Figure 2).

Applicants direct the Examiner's attention to the prior response in this matter where it was maintained that the current rejection failed to set forth the basis for rejection of various dependent claims depending from claim 1 (claims 2 – 7, 10-24 and 26-32). For example, the recited pumping system of claim 4, capable of recirculating the liquid being ozonated, has not been identified as being taught in the '773 patent. Similarly, claim 12 recites a flow valve as controlling the rate of output flow from a dispensing tip. Applicants reiterate that the rejection is incomplete and again respectfully request that the Examiner set forth the basis for rejecting all claims pending in the application.

Turning now, to the office action, claims 1 – 7, 10 – 24 and 26 – 32 remain rejected under 35 USC §102(b) as being anticipated by Burris '773. Claim 8 was rejected over Burris '773 in view of Burris (5,422,043) or Burris (5,858,283).

I. Claims 1 – 7, 10 – 24 and 26 – 32 rejected under 35 USC §102(b) as being anticipated by Burris '773

Considering the rejection of claims 1 – 7, 10 – 24 and 26 – 32 under 35 USC §102(b) as being anticipated by Burris '773, Applicants respectfully traverse the rejection. Burris '773 is cited as teaching a liquid treatment system comprising an untreated liquid source. The referenced system of Burris '773, for example Fig. 4, requires supply pressure (col. 2 line 66 in conjunction with col. 5, lines 4-10 and col. 5, lines 65-66) to output treated liquid; the inlet liquid displaces liquid within the treatment system in order to cause an output of treated liquid (col. 5, lines 67-68 in conjunction

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with col. 5, lines 29-35). Moreover, the '773 "outputs treated liquid on demand by the opening of valve 14." (col. 3, lines 2-5). The Examiner has urged that such a "manually demand switch" is taught in Fig. 4 of the '773, yet the '773 patent indicates that the system of Fig. 4 is similar to system 50 of FIG. 3, in using treatment chamber 48 and treated liquid output via manual demand switch 44.

Conversely, claim 1 expressly recites a "controllable delivery system to direct the liquid containing dissolved ozone to the point of use, where a rate of flow through the controllable delivery system is adjusted by the user." The liquid containing dissolved ozone is an important aspect of the present invention as water containing dissolved ozone is a potent oxidizer and germ killer. The dissolved ozone can reduce or eliminate gingivitis, gum bleeding, bad breath, teeth stains, and harmful oral bacteria. As well as cleaning teeth and refreshing the mouth, this inexpensive and easy to use small appliance can save users unpleasant and costly dental treatments and make them more attractive with whiter teeth and sweet breath. (¶[0004]). As the '773 patent does not set forth such a limitation, it cannot anticipate liquid containing dissolved ozone, or control of flow rate, as presently recited in claim 1.

It appears that the "manual demand switch" of the '773 patent has also been identified as the control means for the rate of flow of liquid containing ozone. Yet no teaching has been identified to indicate where the rate of flow is controlled by such a switch. Nor has there been an indication as to how the '773 patent assures that the liquid delivered thereto has dissolved ozone in it ('773 recites delivery of treated liquid, not of liquid containing dissolved ozone). In fact, '773 does not have the configuration required to deliver the liquid containing dissolved ozone as claimed for the instant invention (see e.g., ¶[0022]).

As noted previously, the rejection of record fails to indicate where the limitations of several dependent claims are taught by the '773 patent.

With respect to claim 10, no teaching of the generation of more ozone than can be dissolved is found in '773. Accordingly, the limitations of claim 10 are not anticipated by '773. A similar limitation is found in claim 11, and again absent a reference to a particular teaching of the dissolved ozone concentration being determined by the solubility of ozone in the liquid, no rejection can stand.

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Claim 12 further defines the manner in which the flow of ozonated liquid is controlled through a dispensing tip – use of a valve to control flow. Here again, the Examiner has not indicated where such a limitation is found in '773. Thus, the claim cannot be anticipated and must be indicated as allowable or a suitable rejection set forth.

In amended claims 15 – 17, specific limitations are directed to a device for causing pulsation of the liquid, and Applicants respectfully urge that no such limitation has been identified in support of the rejection of the claims. Moreover, because the term "pulsate" or "pulsation" is not found in '773, the patent cannot support a rejection of claims 15-17 under §102. Accordingly, claims 15 – 17 are presently believed to be in condition for allowance, and an indication thereof is respectfully requested.

With respect to claim 23 (also dependent from claim 1), the use of a removable reservoir would result in the '773 device over-filling without ever outputting the intended treated liquid. In the various embodiments of Burris '773, the apparatus is attached to an external pressurized liquid source (col. 1, lines 37-38), there are no provisions for a supply side, non-pressurized reservoir. The reservoirs 13 referred to in the various embodiments of '773 are treated-liquid reservoirs (col. 3, lines 2-3 & col. 5, lines 14-15). On the other hand, the system of the present invention must output liquid containing dissolved ozone in order to fulfill the requirements of the claimed invention (previously amended claim 1). Thus, claim 23 further recites a removable reservoir, and as such a structure is not taught or suggested by the '773 patent, the claimed invention is unanticipated by the '773 patent.

Insofar as claims 2 – 7, 10 – 24 and 26 - 32, inclusive, are concerned, these claims all depend from now presumably allowable claim 1 and are also believed to be in allowable condition for the reasons hereinbefore discussed with regard to claim 1 and as expressly set forth above with regard to certain of the dependent claims.

II. Claim 8 was rejected over Burris '773 in view of Burris (5,422,043) or Burris (5,858,283).

Turning to the rejection under 35 U.S.C. §103(a), Applicants respectfully incorporate the arguments above in traversal of the rejection of claim 1 from which claim 8 depends. The Examiner has acknowledged that '773 does not teach the use of a diffuser. In fact, '773 teaches the use of a venturi 21 or pump 25 (or inline mixer 19) to combine and mix the ozone gas and liquid.

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Conversely, claim 8 is directed to a "device ... where the ozone containing gas is pumped by a gas pump through a diffuser into the liquid." The Examiner acknowledged that a diffuser is not taught by '773. The Examiner then cites two patents in which the Applicant(s) have taught an ozone diffuser. However, the Examiner has set forth no basis within the references themselves, that would suggest such a modification of the '773 patent to add the recited element. What motivation was there to add a diffuser to the '773 system? Rather, the rejection simply sets forth the conclusion that because a diffuser was taught in the other patents, it would have been obvious to make the combination. This is not the standard for obviousness. Absent a teaching or suggestion for the proposed combination or modification, or the motivation for such a modification, it appears that the instant application has been used as the "recipe" from which elements of the various patents are combined.

Furthermore, several embodiments set forth in '773 do not expressly indicate a pressurized source of ozone gas – leading to the conclusion that one of skill in the art would not have been motivated to combine/modify '773, as to do so would require a pressurized gas source to pass ozone gas into the liquid. Absent a reference to the specific teaching relied upon as the basis for the rejection, this rejection again fails to establish *prima facie* obviousness to which Applicant can or should respond. Applicants further note that prior remarks in this regard have not been responded to by the Examiner (no treatment in Advisory Action), and respectfully request that the Examiner provide the requested basis for the rejection or that the rejection be withdrawn and the subject matter of claim 8 be indicated as allowable in a subsequent communication.

In view of the foregoing remarks and amendments, reconsideration of this application and allowance thereof are earnestly solicited. In the event that additional fees are required as a result of this response, including fees for extensions of time, such fees should be charged to USPTO Deposit Account No. 50-2737 for Basch & Nickerson LLP.

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In the event the Examiner considers personal contact advantageous to the timely disposition of this case, the Examiner is hereby authorized to call Applicant's attorney, Duane C. Basch, at Telephone Number (585) 899-3970, Penfield, New York.

Respectfully submitted,



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